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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,692	11/08/2006	Andreas Seyler	1010751-000093	3037
21839	7590	10/22/2007		
BUCHANAN, INGERSOLL & ROONEY PC			EXAMINER	
POST OFFICE BOX 1404			HOOK, JAMES F	
ALEXANDRIA, VA 22313-1404				
			ART UNIT	PAPER NUMBER
			3754	
			NOTIFICATION DATE	DELIVERY MODE
			10/22/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/591,692	SEYLER ET AL.
Examiner	Art Unit	
James F. Hook	3754	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 01 September 2006.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 11-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 11-19 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/1/06  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application  
6)  Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the corrugated tube shape of claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

Claims 13-15 are objected to because of the following informalities: the different materials are misspelled where it is believed that applicant intended to claim poly-p-phenyleneterephthalamide and poly-m-phenyleneterephthalamide, for purposes of speedy prosecution the examiner will base the rejection on the above correct spelling of the materials in question. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are dependent upon claim 1 which is canceled by amendment therefore the limitations of these claims are not set when they depend from a canceled claim. For purposes of speedy prosecution the examiner will assume these claims are dependent from claim 11.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites the list of three possible forms for the

reinforcing layer but such is contrary to the only two possible forms it can take in claim 11 which therefore makes the claim indefinite where the scope of the claim cannot be determined when it sets forth additional structure contrary to that already claimed, and also positively recites limitations already positively recited in the base claim.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 fails to set forth any additional structure which is not already set forth in the independent claim, therefore it is not clear how this claim modifies the independent claim and therefore the meets and bounds of the claim are not clear.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 12, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto (EP 0947757) in view of Kurimoto. The reference to Yamamoto discloses the recited air hose comprising at least three layers, the middle layer is formed of a reinforcing braid, and the inner and outer layers comprise an elastomeric material, specifically ACM, and where the reinforcement is made of aramid fibers such as aromatic polyamides. The reference to Yamamoto discloses all of the

recited structure with the exception of providing the reinforcing layer in an open weave that allows the inner and outer layers to be in direct contact. The reference to Kurimoto discloses that it is old and well known in the art to form three layer elastomeric hoses with inner and outer elastomeric layers 12 and 13 which touch each other through a reinforcing layer 14 of aramid fiber which is formed of an open weave to allow the inner and outer layers to contact one another. It would have been obvious to one skilled in the art to modify the reinforcing layer of Yamamoto by forming such in an open weave structure to allow the inner and outer layer to contact one another as suggested by Kurimoto where such is an equivalent manner to form the aramid reinforcing layer of a elastomeric three layer hose to allow for contact between the inner and outer layers to insure the layers do not separate thereby saving money in replacement costs due to failure.

Claims 11, 12, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa in view of Kurimoto. The reference to Ozawa discloses the recited air hose comprising at least three layers, the middle layer 3 is formed of a reinforcing braid, and the inner and outer layers 2,4 comprise an elastomeric material, specifically ACM, and where the reinforcement is made of aramid fibers such as aromatic polyamides. The reference to Ozawa discloses all of the recited structure with the exception of providing the reinforcing layer in an open weave that allows the inner and outer layers to be in direct contact. The reference to Kurimoto discloses that it is old and well known in the art to form three layer elastomeric hoses with inner and outer elastomeric layers 12 and 13 which touch each other through a reinforcing layer 14 of

aramid fiber which is formed of an open weave to allow the inner and outer layers to contact one another. It would have been obvious to one skilled in the art to modify the reinforcing layer of Ozawa by forming such in an open weave structure to allow the inner and outer layer to contact one another as suggested by Kurimoto where such is an equivalent manner to form the aramid reinforcing layer of a elastomeric three layer hose to allow for contact between the inner and outer layers to insure the layers do not separate thereby saving money in replacement costs due to failure.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto (EP 0947757) in view of Kurimoto as applied to claims 11, 12, 16-18 above, and further in view of Bak. The reference to Yamamoto as modified discloses all of the recited structure with the exception of setting forth the specific type of aramid fiber such as set forth in claims 13-15. The reference to Bak discloses that it is old and well known in the art to form reinforcing layers of specific aramid materials including those set forth in claims 13-15. It would have been obvious to one skilled in the art to modify the aramid fibers used in Yamamoto as modified to be formed of any equivalent type of aramid fibers used in reinforcements including poly-p-phenyleneterephthalamide and poly-m-phenyleneterephthalamide as suggested by Bak where such is an equivalent type of aramid fiber used to form reinforcements which are known equivalent materials as suggested by the Bak reference.

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa in view of Kurimoto as applied to claims 11, 12, 16-18 above, and further in view of Bak. The reference to Ozawa as modified discloses all of the recited structure

with the exception of setting forth the specific type of aramid fiber such as set forth in claims 13-15. The reference to Bak discloses that it is old and well known in the art to form reinforcing layers of specific aramid materials including those set forth in claims 13-15. It would have been obvious to one skilled in the art to modify the aramid fibers used in Ozawa as modified to be formed of any equivalent type of aramid fibers used in reinforcements including poly-p-phenyleneterephthalamide and poly-m-phenyleneterephthalamide as suggested by Bak where such is an equivalent type of aramid fiber used to form reinforcements which are known equivalent materials as suggested by the Bak reference.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto (EP 0947757) in view of Kurimoto as applied to claims 11, 12, 16-18 above, and further in view of Ito (491). The reference to Yamamoto as modified discloses all of the recited structure with the exception of providing the hose with corrugations. The reference to Ito discloses that it is old and well known in the art to form multilayer hoses of ACM with corrugations to provide more flexibility. It would have been obvious to one skilled in the art to modify the layers in Yamamoto as modified to be formed with corrugations as suggested by Ito where such is an equivalent type shape used for ACM multilayer hoses and where such would provided extra flexibility to make the tube more useful in tight areas.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa in view of Kurimoto as applied to claims 11, 12, 16-18 above, and further in view of Ito (491). The reference to Ozawa as modified discloses all of the recited structure with the

exception of providing the hose with corrugations. The reference to Ito discloses that it is old and well known in the art to form multilayer hoses of ACM with corrugations to provide more flexibility. It would have been obvious to one skilled in the art to modify the layers in Ozawa as modified to be formed with corrugations as suggested by Ito where such is an equivalent type shape used for ACM multilayer hoses and where such would provided extra flexibility to make the tube more useful in tight areas.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Kostamo, Brown, Newberry, Fujiwara, Jung, Ohkoshi, and Shifman disclosing state of the art hoses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



James F. Hook  
Primary Examiner  
Art Unit 3754

JFH